

### ABSTRACT OF THE DISCLOSURE

A method for fabricating Fiber Bragg Grating elements and planar light circuits made thereof. A mask having a predetermined pattern and a wafer are provided, wherein a light-guiding channel filled with light-guiding substance is formed on the wafer. A photoresist layer is then formed to cover the wafer. Magnification of a photolithography apparatus is adjusted to a first Mag., followed by transferring the pattern on the mask to the photoresist layer to form a first pattern. Light-guiding substance not covered by the photoresist layer is then removed so that the first pattern is transferred to the light-guiding channel. The light-guiding channel then forms a Fiber Bragg Grating element.